



GOVERNMENT ENGINEERING COLLEGE, DAMAN
DEPARTMENT OF CIVIL ENGINEERING
FLUID MECHANICS LABORATORY

Bernoulli's theorem apparatus



Basic Details: -

Length of Channel	:	750 mm
Measuring tank	:	400 x 300 mm
Sump Tank	:	900 x 400 x 400 mm



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Meta Centric Height Apparatus



Basic Details: -

Ship Model	:	300 x 150 mm
Water Tank	:	700 x 700 x 300 mm
Sump Tank	:	900 x 400 x 400 mm



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Orifice & Mouthpiece Apparatus



Basic Details: -

Diameter of Orifice	:	8.5 mm
Diameter of Mouthpiece	:	8.5 mm
Diameter of Nozzle	:	25 mm
Length of Nozzle	:	50 mm



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Notch Apparatus



Basic Details: -

Set of Notches	:	V-Notch 60° & U-Notch 90°
Measuring tank	:	400 x 300 mm
Sump Tank	:	900 x 400 x 400 mm
Piping	:	PVC Piping with valves
Pump	:	Self-priming, Monobloc Centrifugal Pump



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Losses in Pipe Fitting Apparatus



Basic Details: -

- Pipe fitting. Pipe elbow. Pipe bends.
- Sudden expansion-1/2" to 1"
- Sudden contraction-1" to 1/2"
- Differential manometer.
- Flow control valve.
- Stop watch.
- Service floor space of 2 m. x 2 m.
- 230 V. A. C. single phase



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REYNOLDS APPARATUS



Basic Details: -

Diameter of conduit :	750 mm
Supply tank :	300 x 300 mm
Sump Tank :	400 x 400 x 700 mm



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Venturimeter and Orificemeter Apparatus



Basic Details: -

- Measuring tank & stop watch.
- Basic piping-1"
- Orifice meter & Venturi Meter inlet & throat diameter 32- & 15-mm resp.
- Differential manometer.
- Flow control valve



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Tilting Flume



Basic Details: -

- A hydraulic flume of c/s 200 x 300 mm & 4000 mm length with transparent window on either sides of 1000 mm length.
- Sliding gates one at upstream and other at the downstream side.
- Screw jack for change of the slope of the flume.
- A Sump tank of sufficient capacity.
- Supply tank with waves damping arrangement. A 1Hp centrifugal monoblock pump.
- Orifice meter with manometer to measure the discharge.
- Inlet/throat dimensions: 50/25 mm respectively.
- Trolley with point gauge for level measurement.
- Weirs: Sharp crested weir (crest length 200 mm) Broad crested weir Ogee weir or spillway.